

Flood Watch and Associated Follow-up Products (FFA)

Example #1 - Flood Watch. Situation - forecasters at WFO Blacksburg, VA see a storm system approaching from the south. Models indicate that the storm could produce moderate to heavy rain over an extended period and forecasters see the potential for flooding, but at this time they cannot predict with certainty which rivers and streams are threatened. The WFO issues a flood watch for counties in Virginia and North Carolina at 2:52 a.m. on Tuesday May 27, 2003.

WGUS61 KRNK 270652
FFARNK

URGENT - IMMEDIATE BROADCAST REQUESTED
FLOOD WATCH
NATIONAL WEATHER SERVICE BLACKSBURG VA
252 AM EDT TUE MAY 27 2003

NCZ003>006-019-020-VAZ022>024-032>035-043>047-058-059-271300-
/O.NEW.KRNK.FL.A.0002.030527T1400Z-030528T0800Z/
/O.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
AMHERST-APPOMATTOX-BEDFORD-BOTETOURT-BUCKINGHAM-CAMPBELL-CASWELL-
CHARLOTTE-FRANKLIN-HALIFAX-HENRY-PATRICK-PITTSYLVANIA-ROANOKE-
ROCKBRIDGE-ROCKINGHAM-STOKES-SUNNY-WILKES-YADKIN-
252 AM EDT TUE MAY 27 2003

...FLOOD WATCH IN EFFECT FROM THIS MORNING TO WEDNESDAY MORNING...

THE NATIONAL WEATHER SERVICE IN BLACKSBURG HAS ISSUED A

- * FLOOD WATCH FOR PARTS OF SOUTHWESTERN VIRGINIA AND NORTHWEST NORTH CAROLINA
- * FROM THIS MORNING TO WEDNESDAY MORNING
- * LOW PRESSURE IS EXPECTED TO STRENGTHEN OVER THE CAROLINAS AND MOVE EAST THIS AFTERNOON AS A POTENT UPPER DISTURBANCE OVER KENTUCKY MOVES OVER THE SOUTHERN APPALACHIANS. AS A RESULT RAIN IS EXPECTED TO REDEVELOP AND BECOME HEAVY AT TIMES ALONG AND EAST OF THE BLUE RIDGE LATER THIS MORNING AND THIS AFTERNOON.
- * LOWER PORTIONS OF THE DAN AND ROANOKE RIVERS ARE ALREADY IN OR NEAR FLOOD DUE TO HEAVY RAINFALL SUNDAY...AND ADDITIONAL RAINFALL COULD EASILY CAUSE SHARP RISES ON THESE RIVERS. AREA CREEKS AND STREAMS ARE ALSO RUNNING HIGH AND COULD FLOOD WITH MORE HEAVY RAIN.

REMEMBER...A FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT IN THE WATCH AREA.

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Notes and Explanations -

(1) The forecaster believes the flood threat starts at 10 a.m. on Tuesday, May 27, 2003 (1400Z). Therefore, the Event Beginning Date/Time group is 030527T1400Z and the beginning time/day phrase used in the 2nd bullet is "THIS MORNING."

Flood Watch and Associated Follow-up Products (continued)

(2) The forecaster wants the watch to be valid until 4 a.m. Wednesday, May 28, 2003 (800Z). Therefore, the Event Ending Date/Time group is 030528T0800Z and the ending time/day phrase used in the 2nd bullet is "WEDNESDAY MORNING."

Flood Watch and Associated Follow-up Products (continued)

Example #2 - Flood Watch: Follow-up With Cancellation, Extension in Area, and Continuation Segments. Situation - WFO Blacksburg had already issued a flood watch for counties in Virginia and North Carolina at 2:52 a.m. on Tuesday May 27, 2003 (see example 1). A little over five hours later at 8:00 am, the forecaster decides that the storm track will be further west, so new counties in North Carolina, Virginia, West Virginia will need to be added and some of the counties in the eastern part of the original watch area will need to be cancelled. This would call for issuance of a product with three segments as follows:

WGUS61 KRNK 271200
FFARNK

URGENT - IMMEDIATE BROADCAST REQUESTED
FLOOD WATCH
NATIONAL WEATHER SERVICE BLACKSBURG VA
800 AM EDT TUE MAY 27 2003

...FLOOD WATCH AREA SHIFTED WESTWARD WITH FLOODING NOW POSSIBLE IN
SOUTHWESTERN VIRGINIA...EASTERN WEST VIRGINIA AND NORTHWEST NORTH
CAROLINA UNTIL TOMORROW MORNING...

NCZ005-006-VAZ044>047-058-059-271300-
/O.CAN.KRNK.FL.A.0002.030527T1400Z-030528T0800Z/
/O.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
APPOMATTOX-BUCKINGHAM-CAMPBELL-CHARLOTTE-CASWELL-HALIFAX-
PITTSYLVANIA-ROCKINGHAM-
800 AM EDT TUE MAY 27 2003

...FLOOD WATCH IS CANCELLED...

THE FLOOD WATCH HAS BEEN CANCELLED. LOW PRESSURE CONTINUES TO
STRENGTHEN OVER THE CAROLINAS AS AN UPPER DISTURBANCE THAT TRIGGERED
HEAVY RAIN OVER KENTUCKY IS STARTING TO MOVE IN OVER THE SOUTHERN
APPALACHIANS. HOWEVER...THE HEAVIEST RAINFALL IS NOW EXPECTED TO
OCCUR FURTHER WEST ALONG BOTH SIDES OF THE BLUE RIDGE THIS MORNING AND
THIS AFTERNOON. THEREFORE...THE FLOOD WATCH IS BEING CANCELLED FOR
THOSE COUNTIES FARTHER EAST FROM THE BLUE RIDGE.

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NCZ001-002-018-VAZ011>018-020-WVZ044-045-272000-
/O.EXA.KRNK.FL.A.0002.030527T1400Z-030528T0800Z/
/O.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
ALLEGHANY-ASHE-BATH-CARROLL-CRAIG-FLOYD-GILES-GRAYSON-GREENBRIER-
MONROE-MONTGOMERY-PULASKI-WATAUGA-WYTHE
800 AM EDT TUE MAY 27 2003

...FLOOD WATCH IN EFFECT FROM THIS MORNING TO WEDNESDAY MORNING...

THE NATIONAL WEATHER SERVICE IN BLACKSBURG HAS EXPANDED THE

* FLOOD WATCH TO INCLUDE THE APPALACHIAN REGIONS OF VIRGINIA...WEST
VIRGINIA AND NORTH CAROLINA

* FROM THIS MORNING TO WEDNESDAY MORNING

Flood Watch and Associated Follow-up Products (continued)

* LOW PRESSURE CONTINUES TO STRENGTHEN OVER THE CAROLINAS AS A POTENT UPPER DISTURBANCE THAT TRIGGERED HEAVY RAIN OVER KENTUCKY IS STARTING TO MOVE OVER THE SOUTHERN APPALACHIANS. HOWEVER...THE HEAVIEST RAINFALL IS NOW EXPECTED TO OCCUR ALONG BOTH SIDES OF THE BLUE RIDGE THIS MORNING AND THIS AFTERNOON. THEREFORE...THE FLOOD WATCH IS BEING EXTENDED INTO AREAS ALONG AND WEST OF THE BLUE RIDGE.

* AREA CREEKS AND STREAMS ARE RUNNING HIGH AND COULD FLOOD WITH MORE HEAVY RAIN.

REMEMBER...A FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT IN THE WATCH AREA.

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NCZ003-004-019-020-VAZ022>024-032>035-043-272000-
/O.CON.KRNK.FL.A.0002.030527T1400Z-030528T0800Z/
/O.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
AMHERST-BEDFORD-BOTETOURT-FRANKLIN-HENRY-PATRICK-ROANOKE-
ROCKBRIDGE-STOKES-SUNNY-WILKES-YADKIN
800 AM EDT TUE MAY 27 2003

...FLOOD WATCH REMAINS IN EFFECT FROM THIS MORNING TO WEDNESDAY MORNING...

THE FLOOD WATCH CONTINUES FOR

* SOUTHWESTERN VIRGINIA AND NORTHWEST NORTH CAROLINA

* FROM THIS MORNING TO WEDNESDAY MORNING

* LOW PRESSURE CONTINUES TO STRENGTHEN OVER THE CAROLINAS AS A POTENT UPPER DISTURBANCE THAT TRIGGERED HEAVY RAIN OVER KENTUCKY IS STARTING TO MOVE OVER THE SOUTHERN APPALACHIANS. THE HEAVIEST RAINFALL IS NOW EXPECTED BE CENTERED OVER THE BLUE RIDGE THIS MORNING AND THIS AFTERNOON. THEREFORE...THE FLOOD WATCH CONTINUES ALONG THE WESTERN SLOPES OF THE BLUE RIDGE.

* ADDITIONAL RAINFALL COULD CAUSE RISES ON THE UPPER REACHES OF THE DAN AND ROANOKE RIVERS RIVERS. AREA CREEKS AND STREAMS ARE ALSO RUNNING HIGH AND COULD FLOOD WITH MORE HEAVY RAIN.

REMEMBER...A FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT IN THE WATCH AREA.

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Notes and Explanations:

(1) A cancellation segment (CAN) is used to remove the zones from the area for which a flood watch no longer applies.

(2) An extension in area segment (EXA) is used for the new zones now being covered by the multi-segmented flood watch.

(3) A continuation segment (CON) is used for the zones in the original watch that will continue to be covered in the multi-segmented flood watch.

(4) All three segments in this product have the same event tracking number.

Flood Watch and Associated Follow-up Products (continued)

(5) This product is being issued at 8:00 a.m. (1200Z), which is still two hours before the event beginning time provided in this and the original product (10:00 a.m. or 1400Z), so the Event Beginning Date/Time for all three segments remains the same as the initial flood watch (030527T1400Z) and “THIS MORNING” is still used in the 2nd bullet of segments 2 and 3.

(6) All three segments, including the cancellation segment, use the same date and time in the Event Ending Date/Time group - i.e., 4 a.m. on May 28th (030528T0800Z).

Flood Watch and Associated Follow-up Products (continued)

Example #3 – Flash Flood Watch. Situation: A storm system is moving into the WFO Springfield, MO area from the west. Forecasters conclude that flash flooding could be triggered by this storm. However, at this time they cannot predict with certainty which specific locations could experience the flash flooding. At 3:00 a.m. (900Z) on Wednesday, March 19, 2003, the WFO issues a flash flood watch for seven counties in southwestern Missouri.

WGUS63 KFGF 190900
FFASGF

URGENT - IMMEDIATE BROADCAST REQUESTED
FLOOD WATCH
NATIONAL WEATHER SERVICE SPRINGFIELD MO
300 AM CST WED MAR 19 2003

MOZ066-077-088-093-094-101-102-191500-
/O.NEW.KSGF.FF.A.0002.030319T1500Z-030320T2200Z/
/O.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
BARRY-BARTON-JASPER-LAWRENCE-MCDONALD-NEWTON-VERNON-
300 AM CST WED MAR 19 2003

...FLASH FLOOD WATCH IN EFFECT FROM THIS MORNING TO THURSDAY
AFTERNOON...

THE NATIONAL WEATHER SERVICE IN SPRINGFIELD HAS ISSUED A

- * FLASH FLOOD WATCH FOR SOUTHWESTERN MISSOURI
- * FROM THIS MORNING TO THURSDAY AFTERNOON
- * A STRONG STORM SYSTEM MOVING NORTHEAST ACROSS THE CENTRAL PLAINS WILL CONTINUE TO PUMP MOISTURE NORTHWARD FROM THE GULF OF MEXICO. A LARGE BAND OF RAIN AND THUNDERSTORMS WILL CONTINUE TO ROTATE NORTHWESTWARD AROUND THIS UPPER LOW. MODERATE TO HEAVY RAIN AND OCCASIONAL THUNDERSTORMS ASSOCIATED WITH THIS BAND WILL CONTINUE OVER THE WATCH AREA MUCH OF TODAY. WIDESPREAD RAINFALL AMOUNTS OF 1 TO 2 INCHES ARE LIKELY IN THE WATCH AREA TODAY...WITH LOCALLY HEAVIER AMOUNTS OF 3 OR MORE INCHES POSSIBLE.

REMEMBER...A FLASH FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT IN THE WATCH AREA. PERSONS IN SOUTHWESTERN MISSOURI SHOULD BE AWARE OF THE POSSIBILITY FOR HEAVY RAINFALL AND FLASH FLOODING... CHECK YOUR PREPAREDNESS REQUIREMENTS...ESPECIALLY IF YOU HAVE INTERESTS ALONG RIVERS IN THE AREA. KEEP INFORMED...AND BE READY FOR ACTION IF FLOODING IS OBSERVED OR IF A FLASH FLOOD WARNING IS ISSUED. STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR YOUR CABLE TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS.

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J. DOE

Notes and Explanations:

(1) The forecaster believes the flood threat starts at 9:00 a.m. on Wednesday, March 19, 2003 (1500Z). Therefore, the Event Beginning Date/Time group is 030319T1500Z and the beginning time/day phrase used in the 2nd bullet is "THIS MORNING."

Flood Watch and Associated Follow-up Products (continued)

(2) The forecaster wants the watch to be valid until 4:00 p.m. Thursday, March 20 (2200Z). Therefore, the Event Ending Date/Time group is 030320T2200Z and the ending time/day phrase used in the 2nd bullet is "THURSDAY AFTERNOON."

Flood Watch and Associated Follow-up Products (continued)

Example #4 – Flash Flood Watch: Follow-up With Extension in Time and Extension In Area Segments. Situation: Six hours after the initial flash flood watch was issued, forecasters at WFO Springfield, MO decide that the approaching storm will cover a wider area and have a longer duration than originally anticipated. At 9:00 a.m. on Wednesday, March 19, they issue a flash flood watch which expands coverage into three counties in southeastern Kansas and extends the event expiration time by eight hours from 4:00 p.m. Thursday afternoon to midnight.

WGUS63 KFGF 191500
FFASGF

URGENT - IMMEDIATE BROADCAST REQUESTED
FLOOD WATCH
NATIONAL WEATHER SERVICE SPRINGFIELD MO
900 AM CST WED MAR 19 2003

...POSSIBILITY OF FLASH FLOODING EXTENDS INTO FAR SOUTHEASTERN
KANSAS NOW EXTENDS UNTIL MIDNIGHT TOMORROW...

MOZ066-077-088-093-094-101-102-192100-
/O.EXT.KSGF.FF.A.0002.000000T0000Z-030321T0600Z/
/O.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
BARRY-BARTON-JASPER-LAWRENCE-MCDONALD-NEWTON-VERNON-
900 AM CST WED MAR 19 2003

...FLASH FLOOD WATCH EXTENDED UNTIL LATE THURSDAY NIGHT...

THE NATIONAL WEATHER SERVICE IN SPRINGFIELD HAS EXTENDED THE

* FLASH FLOOD WATCH

* UNTIL LATE THURSDAY NIGHT

* A STRONG STORM SYSTEM MOVING NORTHEAST ACROSS THE CENTRAL PLAINS
CONTINUES TO DRAW MOISTURE NORTHWARD FROM THE GULF OF MEXICO. RAIN
AND A FEW THUNDERSTORMS ARE BEGINNING TO MOVE INTO THE SOUTHERN
PART OF THE WATCH AREA. HEAVY RAIN IS NOW POSSIBLE INTO TONIGHT...
WITH LOCALIZED AMOUNTS OF 1 TO 2 INCHES POSSIBLE IN THE WATCH
AREA. EVEN HEAVIER AMOUNTS OF 3 OR MORE INCHES COULD STILL OCCUR.

A FLASH FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT
IN THE WATCH AREA. PERSONS IN SOUTHWESTERN MISSOURI SHOULD BE AWARE OF
OF THE POSSIBILITY FOR HEAVY RAINFALL AND FLASH FLOODING...CHECK YOUR
PREPAREDNESS REQUIREMENTS...ESPECIALLY IF YOU HAVE INTERESTS ALONG
SMALL RIVERS AND STREAMS IN THE AREA. KEEP INFORMED...AND BE READY FOR
ACTION IF FLOODING IS OBSERVED OR IF A FLASH FLOOD WARNING IS ISSUED.

STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR YOUR CABLE
TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS.

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Flood Watch and Associated Follow-up Products (continued)

KSZ073-097-101-192100-
/O.EXB.KSGF.FF.A.0002.000000T0000Z-030321T0600Z/
/O.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
BOURBON-CHEROKEE-CRAWFORD-
900 AM CST WED MAR 19 2003

...FLASH FLOOD WATCH IN EFFECT UNTIL LATE THURSDAY NIGHT...

THE NATIONAL WEATHER SERVICE IN SPRINGFIELD HAS EXPANDED THE

* FLASH FLOOD WATCH TO INCLUDE FAR SOUTHEASTERN KANSAS

* UNTIL LATE THURSDAY NIGHT

* A STRONG STORM SYSTEM MOVING NORTHEAST ACROSS THE CENTRAL PLAINS CONTINUES TO DRAW MOISTURE NORTHWARD FROM THE GULF OF MEXICO. RAIN AND A FEW THUNDERSTORMS ROTATING AROUND THIS LOW ARE BEGINNING TO MOVE INTO THE SOUTHERN PART OF THE WATCH AREA. HEAVY RAIN MAY AFFECT AREAS FURTHER WEST INTO SOUTHEASTERN KANSAS AND LAST INTO TONIGHT. LOCAL AMOUNTS OF 1 TO 2 INCHES ARE POSSIBLE IN THE WATCH AREA...WITH 3 OR MORE INCHES STILL POSSIBLE IN SOME LOCATIONS.

A FLASH FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT IN THE WATCH AREA. BE AWARE OF THE POSSIBILITY FOR HEAVY RAINFALL AND FLASH FLOODING...CHECK YOUR PREPAREDNESS REQUIREMENTS... ESPECIALLY IF YOU HAVE INTERESTS ALONG SMALL RIVERS AND STREAMS IN THE AREA. KEEP INFORMED...AND BE READY FOR ACTION IF FLOODING IS OBSERVED OR IF A FLASH FLOOD WARNING IS ISSUED.

STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR YOUR CABLE TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS.

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Notes and Explanations:

- (1) The new counties being added to the flash flood watch are handled in an EXB (extended in both area and time) segment and the counties in the original flood watch are handled in an EXT (extended in time) segment.
- (2) The event beginning time in the original flash flood watch was 9:00 am. Since this follow-up product is being issued at 9:00 am, the event is considered to have already begun and the Event Beginning Date/Time groups for both segments is coded with ten zeros (000000T0000Z). Therefore, no beginning time/day phrases are used in the headlines and 2nd bullets of the EXB and EXT segments.
- (3) The forecaster wants to extend the valid time by eight hours to midnight (0600Z). Therefore, the Event Ending Date/Time group is 030321T0600Z and the ending time/day phrase used is "LATE THURSDAY NIGHT."

Flood Watch and Associated Follow-up Products (continued)

Example #5: Flash Flood Watch (Short and Long Zone Names). Situation: A forecaster at WFO Albuquerque, NM notes a line of thunderstorms has formed and is moving across the state. Conditions are favorable for flash flooding, but the nature of the storm makes it difficult to predict with certainty where it could occur, so a flash flood watch is issued for the day over a wide area.

WGUS65 KABQ 281555
FFAABQ

URGENT - IMMEDIATE BROADCAST REQUESTED
FLOOD WATCH
NATIONAL WEATHER SERVICE ALBUQUERQUE NM
955 AM MDT SAT OCT 28 2000

...FLASH FLOODING POSSIBLE IN THE EAST CENTRAL PLAINS AND SOUTHEAST
NEW MEXICO TODAY...

NMZ006-012-013-018>021-281800-
/O.NEW.KABQ.FF.A.0015.001028T1555Z-001028T2200Z/
/O.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
HARDING COUNTY-CONCHAS LAKE/GUADALUPE COUNTY-QUAY COUNTY-
DE BACA COUNTY-CHAVES COUNTY PLAINS-ROOSEVELT COUNTY-CURRY COUNTY-
955 AM MDT SAT OCT 28 2000

...FLASH FLOOD WATCH IN EFFECT UNTIL THIS AFTERNOON...

THE NATIONAL WEATHER SERVICE IN ALBUQUERQUE HAS ISSUED A

- * FLASH FLOOD WATCH FOR THE EAST CENTRAL PLAINS AND SOUTHEAST AREAS
OF NEW MEXICO
- * UNTIL THIS AFTERNOON
- * AT 950 AM MDT...WELL DEFINED LINE OF STRONG THUNDERSTORMS WAS
MOVING SLOWLY EASTWARD ACROSS PARTS OF EASTERN NEW MEXICO. THE LINE
CURRENTLY EXTENDS FROM WESTERN CHAVES TO NORTHEAST DE BACA INTO
EASTERN SAN MIGUEL AND HARDING COUNTIES. THE LINE OF THUNDERSTORMS
WILL GRADUALLY MOVE EASTWARD AS THE UPPER LEVEL STORM SYSTEM BEGINS
TO MOVE INTO NORTHEAST NEW MEXICO LATER TODAY.
- * SOUTHERLY WINDS...AT THE SURFACE AND ALOFT...ARE CREATING AN
ENVIRONMENT FAVORABLE FOR TRAINING OF THUNDERSTORMS OVER THE
EASTERN PORTIONS OF NEW MEXICO. SOME OF THE STRONGER STORMS COULD
PRODUCE RAINFALL RATES BETWEEN 1 TO 2 INCHES AN HOUR.

A FLASH FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT
IN THE WATCH AREA.

STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR YOUR CABLE
TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS.

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Flood Watch and Associated Follow-up Products (continued)

Notes and Explanation:

(1) The forecaster wants the watch to start immediately because the line of thunderstorms has already formed, so the Event Beginning Date/Time (001028T1555Z) is the same as the product issuance date/time (9:55 a.m. on Saturday, Oct 28, 2000).

(2) Note how the highly variable topography in New Mexico necessitates the use of more terrain-oriented names for some zones such as "Chaves County Plains," while other zones correspond one-to-one with counties.

Flood Watch and Associated Follow-up Products (continued)

Example #6: Flash Flood Watch (Long Zone Names). Situation: A storm system with heavy rainfall is moving onshore into the WFO San Diego, CA area. Because it is difficult to precisely predict where and if flash flood-causing rainfall will occur, a flash flood watch is issued for the night and next day over most of the county warning area.

WGUS66 KSGX 120342
FFASGX

URGENT - IMMEDIATE BROADCAST REQUESTED
FLOOD WATCH
NATIONAL WEATHER SERVICE SAN DIEGO CA
745 PM PST TUE FEB 11 2003

...FLASH FLOODING POSSIBLE OVER SOUTHERN CALIFORNIA UNTIL THURSDAY
MORNING...

CAZ042-043-048-050-055>058-061-062-121200-
/O.NEW.KSGX.FF.A.0003.030212T0345Z-030213T1200Z/
/O.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
ORANGE COUNTY COASTAL AREAS-SAN DIEGO COUNTY COASTAL AREAS-
SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND EMPIRE-
SAN DIEGO COUNTY VALLEYS-SAN BERNARDINO COUNTY MOUNTAINS-RIVERSIDE
COUNTY MOUNTAINS-SANTA ANY MOUNTAINS AND FOOTHILLS-SAN DIEGO COUNTY
MOUNTAINS-COACHELLA VALLEY-SAN DIEGO COUNTY DESERTS-
745 PM PST TUE FEB 11 2003

...FLASH FLOOD WATCH IN EFFECT UNTIL THURSDAY MORNING...

THE NATIONAL WEATHER SERVICE IN SAN DIEGO HAS ISSUED A

* FLASH FLOOD WATCH FOR SAN DIEGO AND ORANGE COUNTIES...THE INLAND
EMPIRE...THE COACHELLA VALLEY AND THE MOUNTAINS AND DESERTS OF
SAN BERNARDINO AND RIVERSIDE COUNTIES

* UNTIL THURSDAY MORNING

* A LARGE STORM SOUTHWEST OF SAN DIEGO WILL CONTINUE TO FEED
MOISTURE INTO SOUTHERN CALIFORNIA TONIGHT AND WEDNESDAY. AS THE
STORM MOVES NORTHEAST RAIN WILL INCREASE ACROSS THE AREA...WITH
HEAVY RAIN LIKELY WEDNESDAY. RAINFALL RATES OF 1/2 INCH PER HOUR
OR MORE WILL PRODUCE STREET FLOODING...AND MAY ALSO BRING SMALL
CREEKS AND STREAMS TO BANKFULL.

A FLASH FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT
IN THE WATCH AREA.

THE HEAVY RAINS WILL INCREASE THE THREAT OF MUDSLIDES AND FLOODING IN
AND BELOW THE BURN AREAS. RESIDENTS IN THESE AREAS SHOULD MAKE
PREPARATIONS FOR FLOODING AND BE PREPARED TO MOVE TO HIGHER GROUND IF
HEAVY RAINS DEVELOP. STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL
MEDIA OR CABLE TELEVISION FOR WATCH UPDATES AND POSSIBLE WARNINGS.

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Flood Watch and Associated Follow-up Products (continued)

Notes and Explanations:

(1) The forecaster wants the watch to start immediately because the storm system is already moving on shore, so the Event Beginning Date/Time (030212T0345Z) is the same as the product issuance date/time (7:45 p.m. on Tuesday, Feb 11, 2003).

(2) Note how the highly variable topography in Southern California necessitates the use of more terrain-oriented zone names such as "San Bernardino County Mountains."

Flood Watch and Associated Follow-up Products (continued)

Example #7: Flood Watch (Long Zone Names). Situation: A large area of moderate rainfall is occurring over the coast range portion of the WFO Portland, OR county warning area. Under current antecedent conditions, this heavily forested area can absorb about two inches of rainfall without significant flooding. Heavier rainfall could occur in a few areas, so the forecaster knows that there is some potential for flooding. Therefore, a flood watch is issued until 11:00pm Saturday evening.

WGUS66 KPQR 220131
FFAPQR

URGENT - IMMEDIATE BROADCAST REQUESTED
FLOOD WATCH
NATIONAL WEATHER SERVICE PORTLAND OR
530 PM PST FRI MAR 21 2003

ORZ001>004-006>008-WAZ021-220700-
/O.NEW.KPQR.FL.A.0007.030322T0130Z-030323T0700Z/
/O.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
NORTH OREGON COAST-CENTRAL OREGON COAST-COAST RANGE OF NORTHWEST
OREGON-CENTRAL COAST RANGE OF WESTERN OREGON-GREATER PORTLAND
METRO AREA-CENTRAL WILLAMETTE VALLEY-SOUTH WILLAMETTE VALLEY-
SOUTH WASHINGTON COAST
530 PM PST FRI MAR 21 2003

...FLOOD WATCH IN EFFECT UNTIL SATURDAY NIGHT...

THE NATIONAL WEATHER SERVICE IN PORTLAND HAS ISSUED A

- * FLOOD WATCH FOR THE WILLAMETTE TRIBUTARIES DRAINING THE NORTHWEST OREGON COAST RANGE AND THE COASTAL RIVERS AND STREAMS OF SOUTHWEST WASHINGTON AND NORTHWEST OREGON
- * UNTIL SATURDAY NIGHT
- * RAIN CONTINUES TO FALL THIS EVENING OVER THE COAST AND COAST RANGE OF SOUTHWEST WASHINGTON AND NORTHWEST OREGON...AND WILL CONTINUE TO BE HEAVY AT TIMES TONIGHT.
- * SEVERAL OF THE RIVERS AND STREAMS DRAINING THE COAST RANGE IN NORTHWEST OREGON AND SOUTHWEST WASHINGTON MAY RISE TO FLOOD STAGE TONIGHT OR SATURDAY. ALONG THE COASTAL SLOPES THE STREAMS MOST AT RISK FOR FLOODING INCLUDE THE NEHALEM...WILSON...SILETTE AND SIUSLAW RIVERS. STREAMS AT RISK FOR FLOODING DRAINING THE EAST SLOPES OF THE COAST RANGE INTO THE WILLAMETTE RIVER INCLUDE THE LUCKIAMUTE...MARYS AND UPPER TULATIN RIVERS.

A FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT IN THE WATCH AREA.

STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR YOUR CABLE TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS. STAGE FORECASTS FOR RIVERS IN THE WATCH AREA SHOULD BE MONITORED. THESE STAGE FORECASTS ARE BASED ON OBSERVED AND FORECAST RAINFALL AND TEMPERATURES. IF ACTUAL RAINFALL AND TEMPERATURES VARY FROM THE FORECAST VALUES...THE RIVER STAGE WILL VARY ACCORDINGLY. RIVER

Flood Watch and Associated Follow-up Products (continued)

FORECASTS ALSO INCLUDE CURRENT AND PLANNED RESERVOIR RELEASES.
FOR THE LATEST RIVER STAGES AND FORECASTS...VISIT OUR WEB PAGE AT
WWW.WRH.NOAA.GOV/PORTLAND/PUBLIC_HYDRO /LOWER CASE/.

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J. DOE

Notes and Explanations:

- (1) The forecaster wants the watch to start immediately because the rainfall has already started, so the Event Beginning Date/Time (030322T0130Z) is the same as the product issuance date/time (5:30 p.m. on Friday, Mar 21, 2003).
- (2) Note how more terrain-oriented zone names such as "Coast Range of Northwest Oregon" are used because of the mountainous topography in coastal Oregon and Washington.
- (3) Note the highly specific description of the areas and streams with the potential for flooding.

Flood Watch and Associated Follow-up Products (continued)

Example #8 - Flood Watch: Follow-up (Long Zone Names). Five and a half hours after the initial flood watch was issued, forecasters at WFO Portland, OR issued a flood watch to update the original watch.

WGUS66 KPQR 220700
FFAPQR

FLOOD WATCH
NATIONAL WEATHER SERVICE PORTLAND OR
1100 PM PST FRI MAR 21 2003

ORZ001>004-006>008-WAZ021-221300-
/O.CON.KPQR.FL.A.0007.000000T0000Z-030323T0700Z/
/O.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
NORTH OREGON COAST-CENTRAL OREGON COAST-COAST RANGE OF NORTHWEST
OREGON-CENTRAL COAST RANGE OF WESTERN OREGON-GREATER PORTLAND METRO
AREA-CENTRAL WILLAMETTE VALLEY-SOUTH WILLAMETTE VALLEY-SOUTH
WASHINGTON COAST-
1100 PM PST FRI MAR 21 2003

...FLOOD WATCH REMAINS IN EFFECT UNTIL SATURDAY NIGHT...

THE FLOOD WATCH CONTINUES FOR

- * THE WILLAMETTE TRIBUTARIES DRAINING THE NORTHWEST OREGON COAST RANGE AND THE COASTAL RIVERS AND STREAMS OF SOUTHWEST WASHINGTON AND NORTHWEST OREGON
- * UNTIL SATURDAY NIGHT
- * MODERATE RAIN CONTINUES TO FALL THIS EVENING OVER THE WATCH AREA WITH A FEW HEAVIER AREAS ON THE COASTAL SLOPES. SO FAR ALL MAJOR RIVERS AND STREAMS DRAINING THE COAST RANGE IN NORTHWEST OREGON AND SOUTHWEST WASHINGTON ARE BELOW FLOOD STAGE...BUT STILL SHOULD BE MONITORED CLOSELY FOR THE POSSIBILITY OF FLOODING SHOULD RAINFALL EXCEED THE CURRENTLY FORECAST VALUES.

A FLOOD WATCH MEANS THAT FLOODING IS POSSIBLE BUT NOT IMMINENT IN THE WATCH AREA.

STAY TUNED TO NOAA WEATHER RADIO...COMMERCIAL MEDIA OR YOUR CABLE TELEVISION PROVIDER FOR WATCH UPDATES AND POSSIBLE WARNINGS. THE LATEST RIVER STAGES AND FORECASTS CAN BE MONITORED AT WWW.WRH.NOAA.GOV/PORTLAND/PUBLIC_HYDRO /LOWER CASE/.

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J. DOE

Flood Watch and Associated Follow-up Products (continued)

Example #9 - Flood Watch: Expiration (Long Zone Names). At the product expiration time for the previously issued flood watch on Saturday, March 22, forecasters at WFO Portland issue a final product to announce expiration of the flood watch.

WGUS66 KPQR 230700
FFAPQR

FLOOD WATCH
NATIONAL WEATHER SERVICE PORTLAND OR
1100 PM PST SAT MAR 22 2003

ORZ001>004-006>008-WAZ021-230715-
/O.EXP.KPQR.FL.A.0007.000000T0000Z-030323T0700Z/
/O.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
NORTH OREGON COAST-CENTRAL OREGON COAST-COAST RANGE OF NORTHWEST
OREGON-CENTRAL COAST RANGE OF WESTERN OREGON-GREATER PORTLAND
METRO AREA-CENTRAL WILLAMETTE VALLEY-SOUTH WILLAMETTE VALLEY-
SOUTH WASHINGTON COAST-
1100 PM PST SAT MAR 22 2003

...FLOOD WATCH IS NO LONGER IN EFFECT...

THE FLOOD WATCH FOR THE WILLAMETTE TRIBUTARIES DRAINING THE
NORTHWEST OREGON COAST RANGE AND THE COASTAL RIVERS AND STREAMS OF
SOUTHWEST WASHINGTON AND NORTHWEST OREGON HAS BEEN ALLOWED TO
EXPIRE.

MODERATE TO HEAVY RAIN FELL OVERNIGHT ALONG THE COAST AND IN THE
COAST RANGE OF SOUTHWEST WASHINGTON AND NORTHWEST OREGON...BUT
REMAINED WITHIN THE RANGE OF FORECAST VALUES. THIS ALLOWED ALL RIVERS
AND STREAMS IN THE WATCH AREA TO REMAIN BELOW FLOOD STAGE. RIVERS
WILL STILL BE AT HIGH LEVELS FOR THE NEXT FEW DAYS BUT GRADUALLY
RECEDE UNTIL THE NEXT STORM ARRIVES THIS TUESDAY.

THE LATEST STAGES AND FORECASTS FOR RIVERS AND STREAMS CAN BE FOUND
AT OUR WEB PAGE AT WWW.WRH.NOAA.GOV/PORTLAND/PUBLIC_HYDRO
/LOWER CASE/.

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J. DOE